

2004 Water Quality Data for Lopez Project

Tables 1, 2, 3, 4, 5, 6, and 7 list all of the drinking water contaminants that were detected from January 2004 through December 2004, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, although representative, may be more than one year old. Water quality data for State water was provided by the Central Coast Water Authority.

CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Table 1 - Treatment of Surface Water Sources		
Turbidity Performance Standard - Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Turbidity of combined filter effluent water must: 1. Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2. Not exceed 1.0 NTU for more than eight consecutive hours. 3. Not exceed 5 NTU at any time.	Treatment Technique for Lopez Project Conventional Treatment	Treatment Technique for Central Coast Water Authority (State Water) Conventional Treatment
Lowest monthly percentage of samples that met Turbidity Performance Standard 1.	100%	100%
Highest single turbidity measurement during the year.	0.24	0.14
The number of violations of any surface water treatment requirement.	0	0

Contaminant (reporting units)	MCL	PHG (MCLG)	Delivered Water		Lopez WTP		CCWA PPWTP		Potential Source of Contamination
			Range	Average	Range	Average	Range	Average	

Table 2 - Microbiological Contaminants									
Total Coliform Bacteria (MPN/100 mL)	More than 5.0% of monthly samples are positive	(0)		ND		ND (a)		ND (a)	Naturally present in the environment
Turbidity (NTU)	TT	TT	0.07 - 0.21	0.11	0.03 - 0.24	0.06 (b)	0.04-0.06	0.05	Surface water runoff
Heterotrophic plate count (CFU/mL)	TT = adequate disinfection (HPC < 500 CFU/mL)	(0)	<1 - 5	<1	<1 - 9	<1 (a)	<1 - 1	1	Naturally present in the environment.

Table 3—Inorganic Contaminants									
Aluminum (ppb)	1000	600		ND	ND - 54	<25	30 - 160	70	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	50	0.004		3		4		NR	Runoff from orchards; natural deposits
Fluoride (ppb)	2000	1000		340	340 - 440	400		ND	Erosion of natural deposits
Nitrate as NO ₃ (ppm)	45	45		ND		ND	1.2 - 4.8	2.85	Runoff and leaching from fertilizer use; sewage; natural erosion
Nitrite and Nitrate as N (ppb)	10,000	10,000		ND		ND		430	Runoff and leaching from fertilizer use; sewage; natural erosion

Table 4—Radioactive Contaminants									
Gross Alpha Particle Activity (pCi/L)	15	-----		NA	ND - 1.93 ± 0.98	0.8 ± 0.98		ND	Erosion of natural deposits

Contaminant (reporting units)			Delivered Water		Lopez WTP		CCWA PPWTP		Potential Source of Contamination
	MCL	PHG (MCLG) or [MRDLG]	Range	Average	Range	Average	Range	Average	
Table 5 - Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors - FEDERAL RULE									
Total Trihalomethanes (ppb)	RAA = 80	-----	41- 78	55 (c)	41 - 78	55 (c)	31 - 60	47.3 (c)	Byproduct of drinking water chlorination.
Haloacetic Acids (ppb)	RAA = 60	-----	10 - 65	29 (c)	10 - 65	29 (c)	9.1 - 26	14.3 (c)	Byproduct of drinking water disinfection.
Total Chlorine Residual (ppm)	MRDL = 4.0 as Cl ₂	[4]	1.32 - 2.40 0.30 - 2.2 (a)	1.74 1.59 (c)	1.18 - 2.41	1.70	1.7 - 3.6	2.6	Drinking water disinfectant added for treatment.
Free Chlorine Residual (ppm)	MRDL = 4.0 as Cl ₂	[4]	1.70 - 3.75 0.41 - 3.14 (a)	2.79 1.76 (c)	1.61 - 3.66	2.85		NR	Drinking water disinfectant added for treatment.
Chlorite (ppb)	1000	(800)	ND - 740 230 - 530 (a)	410 410 (a)		NA		NA	Byproduct of drinking water disinfection.
Chlorate (ppb)	AL = 800	-----	ND - 240 90 - 350 (a)	160 170 (a)		NA		NA	Byproduct of drinking water disinfection.
Chlorine Dioxide (ppb)	800 as ClO ₂	[800]	ND - 350 10 - 210 (a)	70 57 (a)		NA		NA	Drinking water disinfectant added for treatment.
Total Organic Carbon (ppm)	TT	-----		NA	4.2 - 4.7	4.5 (d)	1.9 - 3.2	2.5	Various natural and manmade sources.
Table 6 - Detection of Contaminants with a Secondary Drinking Water Standard									
Aluminum (ppb)	200	-----		ND	ND - 54	<25	30 - 160	70	Residue from some surface water treatment processes
Chloride (ppm)	500	-----	24 - 56	39	24 - 29	25	44 - 126	74	Runoff/leaching from natural deposits
Color (CU)	15	-----	1 - 2	1		1	0 - 5	2	Naturally occurring organic materials
Corrosivity (LI)	Noncorrosive	-----	0.4 - 0.7	0.6 noncorrosive	0.3 - 1.0	0.7 noncorrosive		noncorrosive	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Odor - Threshold (TON)	3	-----	1.0 - 2.0	1.3	1.0 - 3.0	1.4		(e)	Naturally occurring organic materials
Specific Conductance (micromhos/cm)	1600	-----	620 - 730	660	670 - 800	750	257 - 684	449	Runoff/leaching from natural deposits
Sulfate (ppm)	500	-----	83 - 110	92	100 - 130	120		36	Runoff/leaching from natural deposits
Turbidity (NTU)	5	-----	0.07 - 0.21	0.11	0.06 - 0.23	0.12	0.04 - 0.06	0.05	Soil Runoff
Total Dissolved Solids (ppm)	1000	-----	390 - 480	440	480 - 640	510	141 - 376	247	Runoff/leaching from natural deposits
Table 7 - Detection of Contaminants without a Drinking Water Standard									
Alkalinity as CaCO ₃ (ppm)	-----	-----	170 - 300	220	210 - 310	290	66 - 79	74	Runoff/leaching from natural deposits; seawater influence
Boron (ppb)	-----	AL = 1000		ND		ND		98 (2002)	Runoff/leaching from natural deposits
Calcium (ppm)	-----	-----	52 - 80	62	74 - 84	79	44 - 61	55	Runoff/leaching from natural deposits; seawater influence
Hardness as CaCO ₃ (ppm)	-----	-----	220 - 360	280	360 - 380	370	86 - 126	108	Generally found in ground and surface water
Magnesium (ppm)	-----	-----	27 - 38	33	39 - 46	42		13	Runoff/leaching from natural deposits; seawater influence
pH	-----	-----	7.84 - 8.11	7.98	7.7 - 8.1	7.9	7.8 - 8.6	8.3	Runoff/leaching from natural deposits; seawater influence
Potassium (ppm)	-----	-----		ND		ND		2.7	Runoff/leaching from natural deposits; seawater influence
Sodium (ppm)	-----	-----	25 - 46	35	25 - 28	26		46	Runoff/leaching from natural deposits; seawater influence
Vanadium (ppb)	-----	AL = 50		NA	3.8 - 6.2 (2002)	4.9		3.7 (2002)	Runoff/leaching from natural deposits